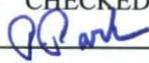


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**PERMIT TO OPERATE  
CHANGE OF CONDITIONS**

**COMPANY NAME, LOCATION ADDRESS:**

ConocoPhillips, Facility ID 800363  
 1660 W. Anaheim Street  
 Wilmington, CA 90744

**EQUIPMENT DESCRIPTION:**

Additions or modifications to the equipment description are underlined and **bolded**. New and modified conditions are underlined and **bolded**. Deletions to the equipment description and conditions are noted in strikeouts.

**Section D of ConocoPhillips' Facility Permit, ID# 800363**

Equipment	ID No.	Connected To	Source Type/ Monitoring Unit	Emissions And Requirements	Conditions
<b>Process 14: ELECTRICITY GENERATION</b>					
<b>System 2: NON EMERGENCY IC ENGINES</b>					
INTERNAL COMBUSTION ENGINE, DIESEL FUEL, CATERPILLAR, MODEL 3306A, 200 HP  A/N: 447255	D670		NOX: PROCESS UNIT*; SOX:	CO: 2000 PPMV DIESEL (5) [RULE 1110.2, 2-1-2008]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; ROG: 250 PPMV DIESEL (5) [RULE 1110.2, 2-1-2008]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.5; C1.68; D28.3**, D28.11; D135.1; H23.30**, K67.14**
<div style="border: 1px solid black; padding: 5px; display: inline-block;">             Moved to SYSTEM 1           </div>					

<b>Process 14: ELECTRICITY GENERATION</b>					
<b>System 1: EMERGENCY IC ENGINES</b>					
INTERNAL COMBUSTION ENGINE, <b>EMERGENCY WATER PUMP</b> , DIESEL FUEL, CATERPILLAR, MODEL 3306A, 200 HP  A/N: 486519	D670		NOX: PROCESS UNIT*; SOX: PROCESS UNIT	CO: 2000 PPMV DIESEL (5) [RULE 1110.2, 2-1-2008]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]  ROG: 250 PPMV DIESEL (5) [RULE 1110.2, 2-1-2008]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005]	B61.5, C1.68, <b>C1.84</b> , D28.3**, D28.11, D135.1, <b>E193.6</b> , H23.30**, <b>H23.35</b> , K67.14**

\*\*Note: The asterisked conditions were added during the proposed initial Title V permit on July 31, 2008.

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**CONDITIONS:**

The following permit conditions shall apply to the subject equipment in order to comply with all applicable District, State, and Federal standards. Additions and deletions to the conditions are noted in underlines and strikeouts, respectively.

**DEVICE CONDITIONS**

B61.5 The operator shall not use diesel fuel containing the following specified compounds:

Compound	Weight percent
Sulfur compounds greater than	0.05

[**RULE 1303(a)(1)-BACT, 5-10-1996**]

[Devices subject to this condition : D669, D670, D671, D672, D673, D674, D675, D676, D677, D678, D679, D680, D681, D683, D1553, D1657, D1658]

~~C1.68 The operator shall limit the operating time to no more than 20 hours in any one calendar year:~~

~~The operator shall install and maintain a(n) non-resettable time meter to accurately indicate the elapsed operating time of the engine.~~

~~The operator shall keep records in a manner approved by the District, for the following parameter(s) or item(s): An engine operating log listing the date of operation, and the elapsed operating time in hours. The log shall be kept and maintained on file for a minimum of three years, and made available to District personnel upon request.~~

[**RULE 1470, 6-1-2007**]

[Devices subject to this condition : D670]

*Note: This condition will be removed and be replaced with C1.84 to fit the facility's request of classifying the engine as " emergency stand by".*

**C1.84 The operator shall limit the operating time to no more than 20 hour(s) in any one year.**

**To comply with this condition, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.**

**The operator shall maintain an engine operating log which, on a monthly basis, shall list all engine operations in each of the following areas:**

**A. Emergency use hours of operation**

**B. Maintenance and testing hours**

**C. Other operating hours (Describe the reason for the operation)**

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**In addition, each time the engine is started manually, the log shall include the date of operation and the time reading in hours at the beginning and end of the operation.**

**The operation of the engine of 20 hours per year shall be allowed as follows:**

- 1. Mechanical breakdown of Pump #349 or electrical outage which causes Pump #349 to become inoperable or**
- 2. Maintenance and testing purposes.**

**[RULE 1110.2; RULE 1303(a)-BACT; RULE 1303(b)(1)-Modeling; RULE 1303(b)(2)-Offsets; RULE 1304(a)-Modeling and Offset Exemption; RULE 1470 6-7-2007]**

**[Devices subject to this condition : D670]**

*Note: This condition was created to satisfy Rule 1110.2 and Rule 1470 that is unique to this engine's purpose as an emergency standby for the Electrical Pump #349.*

#### **D. Monitoring/ Testing Requirements**

D28.3 The operator shall conduct source test(s) in accordance with the following specifications:  
The test shall be conducted at least once every two years, or every 8,760 operating hours, whichever occurs first.

The test shall be conducted to determine the CO emissions using approved District method measured over a 15 minute averaging time period.

The test shall be conducted to demonstrate compliance with Rule 1110.2.

The test shall be conducted to determine the VOC using approved District method measured over a 15 minute averaging time period.

**[RULE 1110.2, 2-1-2008]**

**[Devices subject to this condition : ~~D670~~, D732]**

*Note: During the initial proposed Title V permit on July 31, 2008, this condition was added for the following reasons:*

- 1. Rule 1110.2 was amended and several engines needed to have a permit condition requiring increased recordkeeping, monitoring and testing.*
- 2. Since there were not any open applications, this condition was added for the proposed Title V permit.*

*Since this engine will now be exempt from the requirements of this rule, this device will be removed from this condition.*

D28.11 The operator shall conduct source test(s) in accordance with the following specifications:  
The test shall be conducted once every three years to determine the PM emissions at the outlet.

This condition shall become effective when the initial Title V permit is issued to the facility.

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

**[Devices subject to this condition : D220, D329, D669, ~~D670~~, D671, D674, D687]**

*Note: This engine will be removed because this condition is not applicable for emergency engines. Unlike prime engines, emergency engines have a operating limit.*

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D135.1 The operator shall inspect, adjust, and certify the ignition or fuel injection timing of this engine a minimum of once every 3 years of operation. Inspections, adjustments, and certifications shall be performed by a qualified mechanic and performed in accordance with the engine manufacturer's specifications and procedures.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D669, D670, D671, D672, D673, D674, D675, D676, D677, D678, D679, D680, D681, D1553, D1658, D1768]

H23.30 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	DISTRICT RULE	1110.2
CO	DISTRICT RULE	1110.2

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition :D670, D732]

*Note: During the initial proposed Title V permit on July 31, 2008, this condition was added for the following reasons:*

1. *Rule 1110.2 was amended and several engines needed to have a permit condition requiring increased recordkeeping, monitoring and testing*
2. *Since there were not any open applications, this condition was added for the proposed Title V permit.*

**H23.35 This equipment is subject to the applicable requirements of the following rules or regulations:**

<u>Contaminant</u>	<u>Rule</u>	<u>Rule/Subpart</u>
<u>PM</u>	<u>DISTRICT RULE</u>	<u>1470</u>

**[RULE 1470, 6-1-2007]**

**[Devices subject to this condition :D670]**

**K. Record Keeping/Reporting**

K67.14 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

An engine operating log shall be maintained which on a monthly basis shall include manual and automatic operation and shall list all engine operations in each of the following areas:

- A. Total hours of operation
- B. Type of liquid and/or type of gaseous fuel
- C. Fuel consumption (cubic feet of gas or gallons of liquid)
- D. Cumulative hours of operation since the last source test required by the rule

The log shall be kept for a minimum of five calendar years prior to the current year and made available to the District personnel upon request.

[RULE 1110.2, 2-1-2008]

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[Devices subject to this condition : ~~D670~~, D732]

*Note: During the initial proposed Title V permit on July 31, 2008, this condition was added for the following reasons:*

- 1. Rule 1110.2 was amended and several engines needed to have a permit condition requiring increased recordkeeping, monitoring and testing*
- 2. Since there were not any open applications, this condition was added for the proposed Title V permit.*

*Since this engine will now be exempt from the requirements of this rule, this device will be removed from this condition.*

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**BACKGROUND:**

ConocoPhillips Los Angeles Refinery operates a refinery as two separate locations in the city of Carson and Wilmington. At the Carson Plant crude oil is processed in the crude unit where it is heated and distilled into various hydrocarbon components which are further processed downstream at the Wilmington Plant. The Wilmington Plant is a major producer of fuel products, including gasoline for Southern California. This evaluation is for the Wilmington Plant where it is part of the NO<sub>x</sub> and SO<sub>x</sub> RECLAIM Program. In addition, an initial Title V permit has been proposed on July 31, 2008. The initial Title V permit is currently still pending.

This evaluation covers an application for an Internal Combustion (IC) Engine, as listed in Table 1. The facility requested the following:

- Reclassify a prime engine as an emergency standby engine
- Modify or delete existing conditions that are no longer applicable

ConocoPhillips submitted an application under A/N 486519 to reclassify a prime use IC Engine (device ID No. D670) as emergency standby.

During the initial Title V permit process of July 2008, several engines were given permit conditions for the recently amended Rule 1110.2 that required additional monitoring, recordkeeping, and testing. The conditions added for the subject equipment are Conditions D28.3, H23.30, and K67.14. Because ConocoPhillips is now requesting to reclassify their engine as an emergency standby engine, these conditions will be updated and/or removed to reflect the engine's emergency status (see condition section).

**Table 1- Submitted Applications**

A/N	Date Received	Equipment	Device ID	Requested Action	Previous A/N
486519	8/5/2008	Internal Combustion Engine	D670	• Change of Condition	447255
488012	9/10/2008	RECLAIM Facility Permit Amendment	N/A	• Revise RECLAIM Permit	N/A

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**FEE EVALUATION:**

The fees paid for the applications submitted are as follows:

**Table 2-Application Fees Submitted**

A/N	Equipment	BCAT/ CCAT	Type	Status	Fee Schedule FY 08-09	Fee Required, \$	Fees Paid, \$
486519	Internal Combustion Engine (Emergency)	048901	60	20	B	\$1,016.31	\$1,016.31
488012	RECLAIM Facility Amendment Fee	555010	80	20	--	\$843.80	\$843.80
					Total:	\$1,860.11	\$1,860.11
					Net Fee Due:		\$0.00

**PROCESS DESCRIPTION<sup>a</sup>:**

The engine is a Caterpillar model 3306A compression-ignition unit rated at 200 hp. The IC engine powers a non-emergency general purpose industrial water pump. The following information is a summary of the refinery's water system operations:

**Normal Industrial Water System Operations**

Five pumps are available to maintain pressure for the Refinery's Industrial water system. The Industrial Water System is maintained at 135 psig, and supplies the Refinery water needs in cooling tower make up, pump cooling water, unit wash down station, and unit fire monitor's and deluge systems.

This system is extremely important to continue Refinery operations and must be in service at all times. Any shutdown of this system must be done in sections with complete cooperation and understanding between Utilities, effected Units, Health & Safety and Supervision. Alternate water supply is to be provided as required to keep units operating safely and to keep any fire fighting system operations.

**Industrial Water System**

Three centrifugal pumps at the Industrial Water Pumphouse maintain discharge pressure for the Refinery's industrial water system.

- Two electric driven pumps G-16 (250 gpm) and G-17 (2000 gpm) and Diesel driven pump G-15 pull water from the refinery Reservoir to supply the industrial water system. The water pressure from the Industrial Water pumphouse is controlled by PIC-3-FW and is set at 115 psi.

<sup>a</sup> Process Description provided by ConocoPhillips, prepared by SCEC

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In case the main electric engine G17 (Pump #349) has a mechanical breakdown or power outage, the diesel engine G15 needs to be able to provide power to pump the water.

Currently, the engine is considered to be a prime use, diesel-fueled device, but is subjected to restricted operations pursuant to Rule 1470.

The engine is subject to several permit conditions that apply to prime-use devices. With the proposed modification to reclassify the engine as an emergency-use device, the conditions need to be changed. The total operating hours for emergency use will continue to be permitted 20 hours per year, including maintenance and testing to comply with both Rule 1110.2 and Rule 1470. The engine will not be operated as part of a utility-sponsored demand response program.

Table 3 provides a summary of the engines specifications:

**Table 3-IC Engine Summary**

Specification	
Engine Manufacturer:	Caterpillar
Model:	3306A
Rating:	200 BHP
Type:	4 Cycle
Fuel:	CARB Diesel
Cylinder Configuration:	In-line 6 Cylinder
Engine Speed:	1800 rpm

**PERMIT HISTORY:**

Tables 4 lists the permitting history submitted along with the modifications. The history also shows the permit unit was R219 exempt. Since it was installed prior to the June 3, 1988 amendment, it was exempt from Best Available Control Technology and offsets requirements per A/N 190501's evaluation.

**Table 4- Permit History for FCCU Fractionation System**

Permit to Construct		Permit to Operate		Description of Modification
A/N	Issue Date	A/N	Issue Date	
N/A	N/A	190501	3/12/1990	• Issue Permit to Operate, engine was previously Rule 219 Exempt
N/A	N/A	326050	7/3/1997	• Change of Ownership
N/A	N/A	447255	02/15/2006	• Install catalyzed diesel particulate trap (Rule 1470)

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**EMISSIONS:**

Please note that the emissions remain unchanged as a result of the status change. Because it is an AQMD policy to calculate an emergency engine's emissions per their maintenance and testing hours (20 hrs), the emissions are the same as the previous calculations (condition permit limit at 20 hrs/yr). The engine will still be considered a NO<sub>x</sub> and SO<sub>x</sub> RECLAIM process unit. According to their RECLAIM reporting for the past year, they are below their NO<sub>x</sub> and SO<sub>x</sub> emission limits. The following table shows the engine's recorded data.

**Table 5-RECLAIM Reporting Data**

Record Type	Device id	Report Date	Amt	Compliance?
NP	670	12/31/2007 0:00	13.93	Yes
SP	670	12/31/2007 0:00	0.19	Yes
NP	670	3/31/2008 0:00	355.46	Yes
SP	670	3/31/2008 0:00	4.73	Yes
NP	670	6/30/2008 0:00	0	Yes
SP	670	6/30/2008 0:00	0	Yes
NP	670	9/30/2008 0:00	0	Yes
SP	670	9/30/2008 0:00	0	Yes

Table 6 shows the emissions for the engine.

**Table 6- Engine's Emissions**

	lb/gal	lb/hr	Reference:
NO <sub>x</sub>	0.0313	0.19	RECLAIM default EF (from Rule 2002 pg 2002-21 table)
ROG	0.032	0.19	original permit EF -see A/N 190501
CO	0.102	0.61	original permit EF -see A/N 190501
SO <sub>x</sub>	0.005	0.0299	RECLAIM default EF (from Rule 2002 pg 2002-24 table)
PM	0.0335	0.20	original permit EF -see A/N 190501

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**PERMIT CONDITIONS :**

*Compliance with existing permit conditions*

- Cond. B61.5: The facility provided documentation that they use Ultra Low Sulfur Dyed Diesel, See Attachment I for Certification
- Cond. C1.68: The facility provided records that *exceeded* their operation time of 20 hours/yr. See Attachment II for records. Enforcement has issued a NOV and the engine is back into compliance. With this permit action, this condition will be replaced with C1.84.
- Cond. D28.3: Added during the initial Title V process on July 31, 2008, as an emergency engine, it is exempt from the requirements of Rule 1110.2. This condition will now be removed.
- Cond. D28.11: Title V condition, not taken into effect. This condition is for non-emergency engines; thus will now be removed.
- Cond. D135.1: Inspections, adjustments, and certifications have been done in accordance with the engine's specifications. See Attachment III for record log.
- Cond. H23.30: Added during the initial Title V process on July 31, 2008.
- Cond. K67.14: Added during the initial Title V process on July 31, 2008, as an emergency engine, it is exempt from the requirements of Rule 1110.2. This condition will now be removed.

**COMPLIANCE RECORD REVIEW:**

As of July 7, 2009, a check of the AQMD Compliance Database for the past two years showed that this facility was issued 13 Notice of Violations (NOVs). There was an issue with the engine's Condition C1.68; the facility exceeded their annual operating hours limit. Enforcement has issued a NOV P26964 and the engine is back into compliance. (See Attachment IV for email correspondence). However, none of the other 12 NOVs are for this engine. For detailed violation descriptions, refer to Appendix A.

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**RULES EVALUATION:**

**PART 1 STATE REGULATIONS**

<b>California Environmental Quality Act (CEQA)</b>	
	<p>CEQA requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate identified significant adverse impacts of these projects be considered. The CEQA Applicability Form (400-CEQA) indicates that the proposed project does not have any impacts which trigger the preparation of a CEQA document. The expected impacts of the project on the environment are not significant, this application is to solely reclassify the engine as an emergency standby engine: therefore a CEQA analysis is not required.</p>

**PART 2 SCAQMD REGULATIONS**

<b>Rule 212</b>	<b>Standards for Approving Permits</b>	<b>November 14, 1997</b>
	<p>This modification meets all criteria in Rule 212 for permit approval. The reclassification of the IC Engine as an emergency standby engine does not affect the operation without emitting air contaminants in violation of Division 26 of the State Health and Safety Code or in violation of AQMD's rules and regulations.</p> <p>This modification does not constitute a significant project because (1) the modified permit unit is not located within 1000 feet of a school; (2) the emissions increase does not exceed the daily maximum specified in subdivision (g) of this rule (30 lbs/day); and (3) the modified permit unit does not have an increased cancer risk greater than, or equal to, one in a million (<math>1 \times 10^{-6}</math>) during a lifetime of 70 years or pose a risk of nuisance.</p>	

<b>Rule 401</b>	<b>Visible Emissions</b>	<b>November 9, 2001</b>
(b)(1)	<p>No visible emissions have been reported and are not expected under normal operating conditions. Continued compliance is expected with proper operation and maintenance.</p>	

<b>Rule 402</b>	<b>Nuisance</b>	<b>May 7, 1976</b>
	<p>No nuisance complaints have been reported and are not expected provided that the operation is conducted according to design. Continued compliance with Rule 402 is expected.</p>	

<b>Rule 404</b>	<b>Particulate Matter-Concentration</b>	<b>February 7, 1986</b>
	<p>This rule requires particulate matter discharged into the atmosphere be less than the standard listed in Table 404(a) of this rule. Reclassifying the engine as an emergency standby engine will not increase PM emissions. Therefore, continued compliance is expected.</p>	

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<b>Rule 405</b>	<b>Particulate Matter- Weight</b>	<b>February 7, 1986</b>
	This rule is for no person to discharge any solid particulate matter into the atmosphere from any source. Reclassifying the engine as an emergency standby engine will not increase PM emissions. Therefore, continued compliance is expected.	

<b>Rule 407</b>	<b>Liquid and Gaseous Air Contaminants</b>	<b>April 2, 1982</b>
	According to Rule 407 (b)(2), the provisions of this rule do not apply to stationary internal combustion engines.	

<b>Rule 431.2</b>	<b>Sulfur Content of Liquid Fuels</b>	<b>September 15, 2000</b>
	ConocoPhillips is a SOx RECLAIM facility. In accordance with Rule 431.2(e)(3), the facility shall not purchase any diesel fuel with the sulfur content greater than 15 ppm by weight as supplied by the supplier. A facility condition (i.e., F14.1) is already included on the facility permit requiring that the facility not purchase diesel fuel with sulfur content greater than 15 ppmw.	

<b>Rule 1110.2</b>	<b>Emissions from Gaseous and Liquid Fueled Engines</b>	<b>February 1, 2008</b>
(c)(4)	<p>This rule applies to all stationary and portable engines over 50 rated brake horsepower. The subject engine is stationary and is rated at 200 HP, therefore this rule applies.</p> <p>“EMERGENCY STANDBY ENGINE is an engine which operates as a temporary replacement for primary mechanical or electrical power during periods of fuel or energy shortage or while the primary power supply is under repair.”</p> <p>Because of this proposed permit action and the engine’s purpose, this engine qualifies as an emergency stand by engine. This engine will now be exempt from the requirements of (d) granted by section (h)(2). Section (h)(2) has an exemption for emergency standby engines that have permit conditions to limit operation to 200 hours or less per year.</p> <p>The engine originally contained a condition limiting the operation to no more than 20 hours per year (Condition C1.68), and will continue to be conditioned at 20 hours with Condition C1.84. This new condition was created in order to satisfy the requirements of Rule 1470 as well.</p> <p>Because this engine is exempt from the emission requirements of this rule, the emission limits of “CO: 2000PPMV Diesel and ROG: 250 PPMV Diesel” on the facility permit will be removed. Condition K67.14 will also be removed.</p> <p>Continued compliance with this rule is expected.</p>	

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<b>Regulation XIII</b>	<b>New Source Review (NSR)</b>	<b>December 6, 2002</b>
	NSR does not apply because this permit action does not result in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia.	

<b>Rule 1401</b>	<b>New Source Review of Toxic Air Contaminants</b>	<b>March 7, 2008</b>
	<p>This rule has specific limits for maximum individual cancer risk, cancer burden, and noncancer acute and chronic hazard index from new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants listed in Table I of this rule.</p> <p>Since this permit action is not considered to be a new permit unit, relocation, or modification, this rule does not apply.</p>	

<b>Rule 1470</b>	<b>Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines</b>	<b>June 1, 2007</b>
	<p>This rule applies to any person who owns or operates a stationary CI engine in AQMD with a rated brake horsepower greater than 50(50bhp), except as provided in subdivision (h).</p> <p>The purpose of this application is to reclassify this prime engine as an emergency engine. The facility expected this engine could comply with Rule 1470's definition of "emergency use". Consequently, the scenarios of "emergency use" do not qualify this engine for "emergency use". Hence, the engine will still be considered as a "low-use prime engine" and be exempt from the provisions of paragraph (c)(5) under Rule 1470(h)(11) per Condition C1.84.</p>	
(d)(4)	The operator is <u>not</u> subject to the recordkeeping, reporting, and monitoring requirements of this subdivision per subdivision (h).	
	Compliance is expected.	

<b>Regulation XVII</b>	<b>PREVENTION OF SIGNIFICANT DETERIORATION (PSD)</b>	
	<p>As of July 25, 2007, the USEPA signed a new Limited PSD Delegation agreement with SCAQMD. SCAQMD now has the PSD responsibility for all new PSD sources and all modifications to existing PSD sources where the applicant is requesting to use SCAQMD's existing Regulation XVII to determine PSD applicability for a modification (and not the recent calculation methodology adopted by EPA as part of the NSR Reform).</p> <p>Since this permit action does not have an increase in emissions of any attained criteria pollutants, a PSD applicability is not required.</p>	

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <i>ENGINEERING &amp; COMPLIANCE</i>  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	<b>PAGES</b> 20	<b>PAGE</b> 14
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	<b>PROCESSED BY:</b> Cynthia Carter	<b>CHECKED BY</b>

<b>Regulation XX</b>	<b>RECLAIM</b>	<b>May 6, 2005</b>
	ConocoPhillips is a RECLAIM facility. Therefore, it is subject to Regulation XX. Since this permit action will not result in an emission increase in RECLAIM pollutants, there are no RECLAIM requirements applicable to this modification.	

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <i>ENGINEERING &amp; COMPLIANCE</i>  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	<b>PAGES</b> 20	<b>PAGE</b> 15
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**PART 3 FEDERAL REGULATIONS**

<b>40CFR Part 60 Subpart III</b>	<b>STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES</b>
	<p>Subpart III regulates stationary compression ignition (CI) IC engines that were constructed, reconstructed, or modified after the following dates:.</p> <p>(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.</p> <p>(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:</p> <p>(i) 2007 or later, for engines that are not fire pump engines,</p> <p>(ii) The model year listed in table 3 to this subpart or later model year, for fire pump engines.</p> <p>(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:</p> <p>(i) Manufactured after April 1, 2006 and are not fire pump engines, or</p> <p>(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.</p> <p>(3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.</p> <p>Since this permit action is to reclassify the prime engine, which is not a fire pump engine, as an emergency IC engine, the requirements of this regulation do not apply.</p>

<b>40CFR Part 63 Subpart ZZZZ</b>	<b>NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS) FOR SOURCE CATEGORIES</b>
	<p>Subpart ZZZZ, otherwise known as RICE MACT, regulates stationary reciprocating internal combustion engines (RICE).</p> <p>This regulation does not apply because the engine's rating (200hp) is below the regulation's 250bhp rating.</p>

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <i>ENGINEERING &amp; COMPLIANCE</i>  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	<b>PAGES</b> 20	<b>PAGE</b> 16
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**CONCLUSION:**

Based on the above evaluation ConocoPhillips is in compliance with all required rules and regulations and is expected to continue to comply. ConocoPhillips is also in accord with the permit equipment and conditions. (See Attachment VI for their approval) Therefore, the following is recommended:

A/N	Recommendation
486519	Issue Permit to Operate with conditions listed in the Conditions Section
488012	Issue RECLAIM Facility Permit Revision

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b> <i>ENGINEERING &amp; COMPLIANCE</i> <b>APPLICATION PROCESSING AND CALCULATIONS</b>	<b>PAGES</b> 20	<b>PAGE</b> 17
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**APPENDICES:**

- A. Compliance Status for NOV/NCs

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <i>ENGINEERING &amp; COMPLIANCE</i>  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	<b>PAGES</b> 20	<b>PAGE</b> 18
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**APPENDIX A: COMPLIANCE STATUS FOR NOVS/NCS**

NOTICE NO.	NOTICE TYPE	ISSUE DATE	FOLLOWUP STATUS	VIOLATION
P26964	NOV	2/27/2009	INCOMP	DEVICE ID# 670 WAS OPERATED GREATER THAN 20 HOURS IN VIOLATION OF CONDITION C1.68. DEVICE ID# 670 IS AN IC. ENGINE
P26966	NOV	4/2/2009	INCOMP	THE AQMD WAS NOT NOTIFIED OF AN EXCEEDANCE OF THE 500,000 SCF DURING AN UNPLANNED FLARE EVENT WITHIN ONE HOUR.
P26967	NOV	4/16/2009	INCOMP	1) A GAP GREATER THAN 1/2 INCH WAS FOUND AT THE NORTH SIDE OF THE WEST API. 2) EMISSIONS GREATER THAN 500 PPM WERE FOUND AT THE API. 3) FAILURE TO COMPLY WITH ADMINISTRATIVE CONDITION #2 OF SECTION E.
P48120	NOV	2/22/2008	INCOMP	Failure to comply with conditions S15.2, S15.3, 15.8, 15.9, 15.10 and Administrative Condition #2 of Section # in the Permit to Operate, ID# 800363.
P48122	NOV	2/22/2008	INCOMP	Failure to Comply with Conditions S15.2 and Administrative Condition #2 of Section E in the Permit to Operate, ID# 800363.
P48706	NOV	9/28/2007	INCOMP	1) Light service leak of 50,000 ppm or greater-7 counts, (2) 200 ppm leak at PRD or greater 1 count, (3) open end at process line - 1 count, (4) process drain without water seal.
P48707	NOV	9/28/2007	INCOMP	Leak at wastewater sep. cover exceeding 500 ppm; Wastewater sep. cover with opening, or holes; equip. operating contrary to permit cond. & not in good oper. cond.; light serv. leak in excess of 50,000 ppm leak @ PRD >; process drain w/o water seal.
P48708	NOV	10/5/2007	INCOMP	Facility emissions from electrostatic precipitator stack exceeded rule limits in violation of rule 401 and permit condition F9.1.
P48713	NOV	8/28/2008	INCOMP	1) Light service leak in excess of 50,000 ppm - 2 counts, 2) Leak at water separator cover exceeding 500 ppm-13 counts, 3) Waste water separator cover with openings or holes-1 count, 4) Equip. operating contrary to permit cond. & not in good oper. cond.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <i>ENGINEERING &amp; COMPLIANCE</i>  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	<b>PAGES</b> 20	<b>PAGE</b> 19
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P48714	NOV	8/28/2008	INCOMP	1) Light service leak of 50,000 ppm or greater - 2 counts, (2) Open end at process line - 1 count, (3) Light liquid leak of 3 drops per minute or more - 1 count, (4) Leak at wastewater separator cover exceeding 500 ppm.
P48715	NOV	8/28/2008	INCOMP	Leak or wastewater separator cover in excess of 500 ppm - 3 counts.
P53104	NOV	11/7/2008	INCOMP	NOx emissions from the beginning of the 2007 Compliance Year through the end of the Last Quarter exceeded the annual NOx emissions Allocation in effect at the end of the reconciliation period for that quarter.
P26969	NOV	6/3/2009	Pending	The primary seal of Tank 6, Device ID D549 was not repaired in 72 hours and a written report of the violation was not submitted within 120 hours.

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <i>ENGINEERING &amp; COMPLIANCE</i>  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	<b>PAGES</b> 20	<b>PAGE</b> 20
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	<b>PROCESSED BY:</b> Cynthia Carter	<b>CHECKED BY</b>

**ATTACHMENTS:**

- I. Dion and Sons, Inc Ultra Low Sulfur Dyed Diesel Certification
- II. ConocoPhillips' Engine Use Records, 2008
- III. ConocoPhillips' Maintenance Record, 12/28/06
- IV. AQMD Internal Email Regarding Compliance Issue with Condition C1.68
- V. Caterpillar Engine Information
- VI. ConocoPhillips' Agreement to Permit Equipment and Conditions (February 24, 2009)

## ATTACHMENT I:

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Dion and Sons, Inc  
Ultra Low Sulfur Dyed Diesel Certification



**Cynthia Carter**

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**From:** Beruldsen, Knut J [Knut.J.Beruldsen@conocophillips.com]  
**Sent:** Tuesday, September 30, 2008 3:59 PM  
**To:** Cynthia Carter  
**Subject:** RE: IC Engine device ID 670 (A/N 486519)

Cynthia,

The information you requested is provided below in blue ink. Sorry it took me so long to get back to you.

Please call me at (310) 522-8037 if you have any questions.

Thanks,

Knut

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**From:** Cynthia Carter [mailto:ccarter@aqmd.gov]  
**Sent:** Tuesday, September 09, 2008 11:10 AM  
**To:** Beruldsen, Knut J  
**Subject:** IC Engine device ID 670 (A/N 486519)

Hello Knut,

I need to find out which method of compliance for Rule 1470 ConocoPhillips will follow for their proposal to reclassify their prime IC Engine (device ID D670) to an emergency engine under A/N 486519.

According to Rule 1470(c)(3)(C)(i)(I), it does not limit the operation of an emergency engine, but limits the maintenance and testing time. The engine currently has Condition C1.68 to limit its operation to 20 hours/yr, so I would like to know if ConocoPhillips wants this to change to maintenance and testing 20 hours/yr?

If possible, ConocoPhillips would like 20 hours/year for maintenance and testing purposes.

1. If so, could you please provide me with documentation/data to show compliance at 0.4g/bhp-hr per (c)(3)(C)(i)(I) and (d)(4)(B);

Per (c)(3)(C)(i)(I), we do not operate the engine for more than 20 hours/year for maintenance and testing purposes. For this reason, the 0.4 gram/bhp-hr PM emission limit is not applicable to this engine. Also, for the same reason, (d)(4)(B) is not applicable to this engine.

2. Could you please provide me with some documentation that shows the engine complies with its other permit condition B61.5 and 40 CFR 63 Subpart ZZZZ.

Condition B61.5 requires use of diesel fuel with a max sulfur content of 15 ppm. Diesel fuel for the engine is provided by Dion & Sons and a copy of a fuel certification letter dated September 23, 2008, is attached.

Part 63 Subpart ZZZZ does not have any requirements applicable to existing stationary RICE with a site rating below 250 BHP.

10/3/2008



Bulk Fuels ♦ Lubricants ♦ Cardlock ♦ Services ♦ Solvents ♦ Equipment

September 23, 2008

John Schmidt  
Conocophillips  
Los Angeles Refinery  
1660 W. Anaheim Street  
Wilmington, CA 90744

Subject: Fuel Sales

Mr. Schmidt-

As per our phone conversation, I am providing this letter to officially advise you, and all concerned of the product we are providing you.

Dion & Sons, Inc. is only providing Ultra Low Sulfur Dyed Diesel to Conocophillips locations.

If you have any questions, please do not hesitate to give Ron Padgett or myself at 562-432-3946.

Thank you,

A handwritten signature in cursive script that reads "Nora Mancillas".

Nora Mancillas  
Corporate Administrative Manager

## ATTACHMENT II:

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ConocoPhillips' Engine Use Records, 2008

**Cynthia Carter**


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**From:** Beruldsen, Knut J [Knut.J.Beruldsen@conocophillips.com]  
**Sent:** Wednesday, December 31, 2008 3:24 PM  
**To:** Cynthia Carter  
**Subject:** RE: IC Engine device ID 670 (A/N 486519)

Cynthia,

Attached are the requested records for the subject engine.

The subject industrial water pump engine is part of the refinery's industrial water system and only operates when electric water pump 349 is out of service. Pump 349 experienced a bearing failure during June 2008 and was taken out of service for maintenance. While Pump 349 was out of service the industrial water pump engine operated for 26 hours resulting in an exceedance of the annual operating hours limit.

If you have any questions or need additional information, please call me at (310) 522-8037.

Knut

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**From:** Cynthia Carter [mailto:ccarter@aqmd.gov]  
**Sent:** Friday, November 21, 2008 8:38 AM  
**To:** Beruldsen, Knut J  
**Subject:** IC Engine device ID 670 (A/N 486519)

Knut,

I neglected to ask you how does ConocoPhillips' IC Engine device ID 670 complies with the following conditions:

- Condition C1.68:

The operator shall limit the operating time to no more than 20 hours in any one calendar year:

The operator shall install and maintain a(n) non resettable time meter to accurately indicate the elapsed operating time of the engine.

The operator shall keep records in a manner approved by the District, for the following parameter(s) or item(s): An engine operating log listing the date of operation, and the elapsed operating time in hours. The log shall be kept and maintained on file for a minimum of three years, and made available to District personnel upon request.

[RULE 1470, 6-1-2007]

[Devices subject to this condition : D670];

and

- Condition D135.1:

The operator shall inspect, adjust, and certify the ignition or fuel injection timing of this engine a minimum of once every 3 years of operation. Inspections, adjustments, and certifications shall be performed by a qualified mechanic and performed in accordance with the engine manufacturer's specifications and procedures.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D669, D670, D671, D672, D673, D674, D675, D676, D677, D678, D679, D680, D681, D1553, D1658, D1768]

12/31/2008

Could you provide records/documentation for one year that shows the engine complies with these conditions?

Thanks again,  
Cynthia

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**Cynthia Carter**  
**Air Quality Engineer**  
Refinery and Waste Management Permitting  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
(909)396-2431  
[ccarter@aqmd.gov](mailto:ccarter@aqmd.gov)

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## AQMD RULE #1470 ENGINE USE RECORD

YEAR 2007

MONTH: DEC.

ENGINE NAME: INDUSTRIAL WATER PUMP 169  
 LOCATION: Rd 14 Industrial Water Pump House  
 RATED BPH: 200

AQMD PERMIT ID: D670  
 DRIVER CLASS: In-Use Prime Mover

Usage Event History: (hour meter readings)

Name:	Date:	Initial hrs	Final hrs	Total hrs	Exemption Code	Non-Exempt Code	Total Hours Exempt	Total Hours Non-Exempt	
		<u>1024</u>	<u>1025</u>	<u>1</u>	<u>C</u>		<u>1</u>	<u>0</u>	
Reason	<u>WEEKLY TESTING</u>								
Reason									
Reason									
Reason									
Reason									
Reason									
Reason									
Reason									
							<b>Totals:</b>	<u>1</u>	<u>0</u>

Note: There are no initial start-up hours associated with this engine

Total Non-Exempt Hours This Month 0  
 Total Non-Exempt Hours Year to Date: 16.0

SUPERVISOR ELDER

DATE: 01-11-08  
JH

COMMENTS:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**AQMD RULE #1470  
ENGINE USE RECORD**

YEAR 2008

MONTH: JAN

ENGINE NAME: INDUSTRIAL WATER PUMP #169

LOCATION: Rd 14 Industrial Water Pump House

RATED BPH: 200

AQMD PERMIT ID: D670

DRIVER CLASS: In-Use Prime Mover

Usage Event History: (hour meter readings)

Name:	Date:	Initial hrs	Final hrs	Total hrs	Exemption Code	Non-Exempt Code	Total Hours Exempt	Total Hours Non-Exempt
<u>KJB</u>		<u>1025</u>	<u>1025</u>	<u>0</u>				
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
							Totals:	

Note: There are no initial start-up hours associated with this engine

Total Non-Exempt Hours This Month 0

Total Non-Exempt Hours Year to Date: 0

SUPERVISOR E106R

DATE: 3/15/08

KJB  
12/30/08

COMMENTS:

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\_\_\_\_\_

## AQMD RULE #1470 ENGINE USE RECORD

YEAR 2008.

MONTH: Feb.

ENGINE NAME: INDUSTRIAL WATER PUMP # 169

LOCATION: Rd 14 Industrial Water Pump House

RATED BPH: 200

AQMD PERMIT ID: D670

DRIVER CLASS: In-Use Prime Mover

**Usage Event History: (hour meter readings)**

Name	Date	Initial hrs	Final hrs	Total hrs	Exemption Code	Non-Exempt Code	Total Hours Exempt	Total Hours Non-Exempt
<u>KJB</u>		<u>1025.0</u>	<u>1025</u>	<u>0</u>				
Reason								
Reason								
Reason								
Reason								
Reason								
Reason								

Note: There are no initial start-up hours associated with this engine

Totals:  

Total Non-Exempt Hours This Month 0

Total Non-Exempt Hours Year to Date: 0

SUPERVISOR E/DER

DATE: 3/13/08

COMMENTS:

KJB  
12/30/08

## AQMD RULE #1470 ENGINE USE RECORD

YEAR 2008

MONTH: MARCH

ENGINE NAME: INDUSTRIAL WATER PUMP # 169  
 LOCATION: Rd 14 Industrial Water Pump House  
 RATED BPH: 200

AQMD PERMIT ID: D670  
 DRIVER CLASS: In-Use Prime Mover

Usage Event History: (hour meter readings)

Name:	Date:	Initial hrs	Final hrs	Total hrs	Exemption Code	Non-Exempt Code	Total Hours Exempt	Total Hours Non-Exempt
<u>KJB</u>		<u>1026</u>	<u>1025</u>	<u>1</u>				
	Reason	↪						
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
							Totals:	<u>1</u>

Note: There are no initial start-up hours associated with this engine

Total Non-Exempt Hours This Month 1 KJB 12/30/08

Total Non-Exempt Hours Year to Date: 1

SUPERVISOR CASTRO

DATE: 4-20-08

COMMENTS:

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## AQMD RULE #1470 ENGINE USE RECORD

YEAR 2008

MONTH: April

ENGINE NAME: INDUSTRIAL WATER PUMP #169

LOCATION: Rd 14 Industrial Water Pump House

RATED BPH: 200

AQMD PERMIT ID: D670

DRIVER CLASS: In-Use Prime Mover

**Usage Event History: (hour meter readings)**

Name	Date	Initial hrs	Final hrs	Total hrs	Exemption Code	Non-Exempt Code	Total Hours Exempt	Total Hours Non-Exempt	
<u>EB</u>		<u>1026</u>	<u>1026</u>	<u>0</u>					
	Reason								
	Reason								
	Reason								
	Reason								
	Reason								
	Reason								
	Reason								
							Totals:	<u>0</u>	<u>0</u>

Note: There are no initial start-up hours associated with this engine

Total Non-Exempt Hours This Month 0

Total Non-Exempt Hours Year to Date: 1

SUPERVISOR \_\_\_\_\_

DATE: 4/30/08  
12/30/08

COMMENTS:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**AQMD RULE #1470  
ENGINE USE RECORD**

YEAR 2008

MONTH: May

ENGINE NAME: INDUSTRIAL WATER PUMP  
LOCATION: Rd 14 Industrial Water Pump House  
RATED BPH: 200  
AQMD PERMIT ID: D670  
DRIVER CLASS: In-Use Prime Mover

INITIAL ENGINE HOUR READING: 1026

FINAL ENGINE HOUR READING: 1027

TOTAL HOURS RUN IN MONTH: 1

TOTAL HOURS RUN YEAR TO DATE: 2

OPERATOR: *Blal*

DATE: 5-31-08

COMMENTS:

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\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## AQMD RULE #1470 ENGINE USE RECORD

YEAR 2008

MONTH: JULY

ENGINE NAME: INDUSTRIAL WATER PUMP 1109

LOCATION: Rd 14 Industrial Water Pump House

RATED BPH: 200

AQMD PERMIT ID: D670

DRIVER CLASS: In-Use Prime Mover

Usage Event History: (hour meter readings)

Name	Date	Initial hrs	Final hrs	Total hrs	Exemption Code	Non-Exempt Code	Total Hours Exempt	Total Hours Non-Exempt
<u>KLP</u>		<u>1049</u>	<u>1053</u>	<u>0</u>				
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
							Totals:	<u>0</u>

Note: There are no initial start-up hours associated with this engine

Total Non-Exempt Hours This Month 0

Total Non-Exempt Hours Year to Date: 28

SUPERVISOR ELOP

DATE: 7/10/08

KLP  
12/30/08

COMMENTS:

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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## AQMD RULE #1470 ENGINE USE RECORD

YEAR 2008

MONTH: AUG

ENGINE NAME: INDUSTRIAL WATER PUMP 169

LOCATION: Rd 14 Industrial Water Pump House

RATED BPH: 200

AQMD PERMIT ID: D670

DRIVER CLASS: In-Use Prime Mover

Usage Event History: (hour meter readings)

Name:	Date:	Initial hrs	Final hrs	Total hrs	Exemption Code	Non-Exempt Code	Total Hours Exempt	Total Hours Non-Exempt	
<u>ARZOLA</u>	<u>08 03-08</u>	<u>1053</u>	<u>1053</u>	<u>0</u>	<u>C</u>		<u>0</u>		
	Reason								
<u>SMC</u>	<u>8-27/08</u>	<u>1053.0</u>	<u>1054</u>	<u>1</u>				<u>1</u>	
	Reason								
	Reason								
	Reason								
	Reason								
	Reason								
	Reason								
							Totals:	<u>1</u>	

Note: There are no initial start-up hours associated with this engine

Total Non-Exempt Hours This Month 1

Total Non-Exempt Hours Year to Date: 1

SUPERVISOR E/OER

DATE: 8/5/08

*KJB*  
12/30/08

COMMENTS:

## AQMD RULE #1470 ENGINE USE RECORD

YEAR 2008

MONTH: SEPT

ENGINE NAME: INDUSTRIAL WATER PUMP 109  
 LOCATION: Rd 14 Industrial Water Pump House  
 RATED BPH: 200

AQMD PERMIT ID: D670  
 DRIVER CLASS: In-Use Prime Mover

Usage Event History: (hour meter readings)

Name	Date	Initial hrs	Final hrs	Total hrs	Exemption Code	Non-Exempt Code	Total Hours Exempt	Total Hours Non-Exempt
<u>K, 10</u>	<u>12/30/08</u>	<u>10.54</u>	<u>10.55</u>	<u>1</u>				
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							

Note: There are no initial start-up hours associated with this engine

Totals:  

Total Non-Exempt Hours This Month 1

Total Non-Exempt Hours Year to Date: 30

SUPERVISOR \_\_\_\_\_

DATE: KJP 12/30/08

COMMENTS:

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# AQMD RULE #1470 ENGINE USE RECORD

YEAR 2008

MONTH: OCT

ENGINE NAME: INDUSTRIAL WATER PUMP 119

LOCATION: Rd 14 Industrial Water Pump House

RATED BPH: 200

AQMD PERMIT ID: D670

DRIVER CLASS: In-Use Prime Mover

Usage Event History: (hour meter readings)

Name:	Date:	Initial hrs	Final hrs	Total hrs	Exemption Code	Non-Exempt Code	Total Hours Exempt	Total Hours Non-Exempt
<u>Kelly</u>	<u>10</u>	<u>1055</u>	<u>1063</u>	<u>8</u>	<u>C</u>		<u>8</u>	
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							

Note: There are no initial start-up hours associated with this engine

Totals: 8

Total Non-Exempt Hours This Month 8

Total Non-Exempt Hours Year to Date: 38

SUPERVISOR \_\_\_\_\_

DATE: 12/30/08

COMMENTS:

## AQMD RULE #1470 ENGINE USE RECORD

YEAR 2008

MONTH: NOV

ENGINE NAME: INDUSTRIAL WATER PUMP 109  
 LOCATION: Rd 14 Industrial Water Pump House  
 RATED BPH: 200

AQMD PERMIT ID: D670  
 DRIVER CLASS: In-Use Prime Mover

Usage Event History: (hour meter readings)

Name:	Date:	Initial hrs	Final hrs	Total hrs	Exemption Code	Non-Exempt Code	Total Hours Exempt	Total Hours Non-Exempt
HICKEY	NOV. 6, 08	1063	1065	2				
	Reason	ERT TRAINING						
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							
	Reason							

Note: There are no initial start-up hours associated with this engine

Totals:  

Total Non-Exempt Hours This Month 2

Total Non-Exempt Hours Year to Date: 40

*KJB*  
*12/30/08*

SUPERVISOR E/OER

DATE: 11/08

COMMENTS:

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**Attachment III:**

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ConocoPhillips' Maintenance Record, 12/28/06

**Cynthia Carter**


---

**From:** Beruldsen, Knut J [Knut.J.Beruldsen@conocophillips.com]  
**Sent:** Wednesday, December 31, 2008 3:24 PM  
**To:** Cynthia Carter  
**Subject:** RE: IC Engine device ID 670 (A/N 486519)

Cynthia,

Attached are the requested records for the subject engine.

The subject industrial water pump engine is part of the refinery's industrial water system and only operates when electric water pump 349 is out of service. Pump 349 experienced a bearing failure during June 2008 and was taken out of service for maintenance. While Pump 349 was out of service the industrial water pump engine operated for 26 hours resulting in an exceedance of the annual operating hours limit.

If you have any questions or need additional information, please call me at (310) 522-8037.

Knut

---

**From:** Cynthia Carter [mailto:ccarter@aqmd.gov]  
**Sent:** Friday, November 21, 2008 8:38 AM  
**To:** Beruldsen, Knut J  
**Subject:** IC Engine device ID 670 (A/N 486519)

Knut,

I neglected to ask you how does ConocoPhillips' IC Engine device ID 670 complies with the following conditions:

- Condition C1.68:

The operator shall limit the operating time to no more than 20 hours in any one calendar year:

The operator shall install and maintain a(n) non resettable time meter to accurately indicate the elapsed operating time of the engine.

The operator shall keep records in a manner approved by the District, for the following parameter(s) or item(s): An engine operating log listing the date of operation, and the elapsed operating time in hours. The log shall be kept and maintained on file for a minimum of three years, and made available to District personnel upon request.

[RULE 1470, 6-1-2007]

[Devices subject to this condition : D670];

and

- Condition D135.1:

The operator shall inspect, adjust, and certify the ignition or fuel injection timing of this engine a minimum of once every 3 years of operation. Inspections, adjustments, and certifications shall be performed by a qualified mechanic and performed in accordance with the engine manufacturer's specifications and procedures.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D669, D670, D671, D672, D673, D674, D675, D676, D677, D678, D679, D680, D681, D1553, D1658, D1768]

12/31/2008

INDUSTRIAL MAINTENANCE COMPANY

1231 E. "G" STREET  
WILMINGTON, CA 90744  
(310) 834-8423  
(310) 834-6510 FAX

FAX COVER LETTER

DATE: 12-8-08  
FAX NUMBER: (310) 522-7817

TIME: 2:26 pm  
PAGES: 12  
(including this cover sheet)

ATTENTION: Kanute  
COMPANY: Conoco Phillips

FROM: Army  
WITH: INDUSTRIAL MAINTENANCE COMPANY

REGARDING: tri-annual timing inspections - 2008

Please contact us if all pages are not received.



INDUSTRIAL MAINTENANCE  
 1231 EAST 10<sup>TH</sup> STREET  
 WILMINGTON, CA 90744  
 (310) 834-6423  
 BART AC 188202  
 12/28/05 INVOICE 92633

CONOCO PHILLIPS COMPANY  
 P.O. BOX 758  
 WILMINGTON, CA 90748  
 (310) 952-5253  
 MAKE: ANY MODEL: YEAR: 00  
 MILES: 1 LICENSE: U001 BY: BJA

SHOP LABOR DESCRIPTION	MECH	AMOUNT	CUSTOMER P.O.
REPAIRS TO INDUSTRIAL WATER PUMP #169			
THE ANNUAL TIMING CHECK			
CHARGE # 4214507			
HOURS: 1006	BJA	175.00	TERMS NET 10 DAYS

*Any warranties on parts and accessories sold hereby are made by the manufacturer. The above shop disclaims all warranties, including implied warranties of merchantability or fitness for the particular purpose, and does not authorize any person to assume for it any liability.*

SERVICE CHARGE OF 1.5% PER MONTH  
 CHARGED ON OVERDUE ACCOUNTS

LABOR TOTAL	175.00
OTHER CHARGES	00
PARTS TOTAL	00
SALES TAX	00
PD IN ADVANCE	00
CHARGED	175.00

## Attachment IV:

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AQMD Internal Email Regarding  
Compliance Issue with Condition C1.68

**Cynthia Carter**

---

**From:** Gale Jones  
**Sent:** Friday, May 08, 2009 7:28 AM  
**To:** Cynthia Carter  
**Subject:** RE: Hours of operation for old diesel engine ID#670

Good Morning Cynthia;

I went a head and put them in compliance as of 1-1-09. I cannot fill in the final action area, legal does that.

Gale

-----Original Message-----

**From:** Cynthia Carter  
**Sent:** Thursday, May 07, 2009 5:03 PM  
**To:** Gale Jones  
**Subject:** RE: Hours of operation for old diesel engine ID#670

Does this mean the engine is in compliance? If so, when will the NOV status be updated?

-----Original Message-----

**From:** Gale Jones  
**Sent:** Thursday, May 07, 2009 4:00 PM  
**To:** Cynthia Carter  
**Subject:** Hours of operation for old diesel engine ID#670

Hi Cynthia;

I checked the engine and got the hours of operation as of today and the engine has operated for 4 hours in 2009.

Any thing else? Let me know.

Also, there may be a training session at Carson next Tuesday but I do not have a time or verification.

Gale

**Cynthia Carter**

---

**From:** Cynthia Carter  
**Sent:** Tuesday, January 06, 2009 7:48 AM  
**To:** Paul Caballero  
**Cc:** Paul Park  
**Subject:** Compliance Issue: IC Engine device ID 670 (A/N 486519)

Hello Paul,

I would like to inform you that ConocoPhillips, Wilmington went out of compliance for their IC Engine (device ID 670). Apparently, the engine exceeded its allowable operating limit (Condition C1.68). The attached records show the engine's usage for 2008.

If you have any questions, feel free to call me.

Thanks,  
Cynthia

---

**Cynthia Carter**  
**Air Quality Engineer**  
Refinery and Waste Management Permitting  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
(909)396-2431  
[ccarter@aqmd.gov](mailto:ccarter@aqmd.gov)

---

-----Original Message-----

**From:** Beruldsen, Knut J [mailto:Knut.J.Beruldsen@conocophillips.com]  
**Sent:** Wednesday, December 31, 2008 3:24 PM  
**To:** Cynthia Carter  
**Subject:** RE: IC Engine device ID 670 (A/N 486519)

Cynthia,

Attached are the requested records for the subject engine.

The subject industrial water pump engine is part of the refinery's industrial water system and only operates when electric water pump 349 is out of service. Pump 349 experienced a bearing failure during June 2008 and was taken out of service for maintenance. While Pump 349 was out of service the industrial water pump engine operated for 26 hours resulting in an exceedance of the annual operating hours limit.

If you have any questions or need additional information, please call me at (310) 522-8037.

Knut

---

**From:** Cynthia Carter [mailto:ccarter@aqmd.gov]  
**Sent:** Friday, November 21, 2008 8:38 AM  
**To:** Beruldsen, Knut J

1/7/2009

**Subject:** IC Engine device ID 670 (A/N 486519)

Knut,

I neglected to ask you how does ConocoPhillips' IC Engine device ID 670 complies with the following conditions:

- Condition C1.68:

The operator shall limit the operating time to no more than 20 hours in any one calendar year:

The operator shall install and maintain a(n) non resettable time meter to accurately indicate the elapsed operating time of the engine.

The operator shall keep records in a manner approved by the District, for the following parameter(s) or item(s): An engine operating log listing the date of operation, and the elapsed operating time in hours. The log shall be kept and maintained on file for a minimum of three years, and made available to District personnel upon request.

[RULE 1470, 6-1-2007]

[Devices subject to this condition : D670];

and

- Condition D135.1:

The operator shall inspect, adjust, and certify the ignition or fuel injection timing of this engine a minimum of once every 3 years of operation. Inspections, adjustments, and certifications shall be performed by a qualified mechanic and performed in accordance with the engine manufacturer's specifications and procedures.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D669, D670, D671, D672, D673, D674, D675, D676, D677, D678, D679, D680, D681, D1553, D1658, D1768]

Could you provide records/documentation for one year that shows the engine complies with these conditions?

Thanks again,  
Cynthia

---

Cynthia Carter  
Air Quality Engineer  
Refinery and Waste Management Permitting  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
(909)396-2431  
[ccarter@aqmd.gov](mailto:ccarter@aqmd.gov)

---

**Cynthia Carter**

---

**From:** Paul Park  
**Sent:** Tuesday, January 06, 2009 8:21 AM  
**To:** Edwin Pupka  
**Cc:** Jay Chen; Cynthia Carter  
**Subject:** FW: Compliance Issue: IC Engine device ID 670 (A/N 486519)

Ed,

Fyi – please see below.

Thanks.

-----Original Message-----

**From:** Cynthia Carter  
**Sent:** Tuesday, January 06, 2009 7:48 AM  
**To:** Paul Caballero  
**Cc:** Paul Park  
**Subject:** Compliance Issue: IC Engine device ID 670 (A/N 486519)

Hello Paul,

I would like to inform you that ConocoPhillips, Wilmington went out of compliance for their IC Engine (device ID 670). Apparently, the engine exceeded its allowable operating limit (Condition C1.68). The attached records show the engine's usage for 2008.

If you have any questions, feel free to call me.

Thanks,  
Cynthia

---

**Cynthia Carter**  
**Air Quality Engineer**  
Refinery and Waste Management Permitting  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
(909)396-2431  
[ccarter@aqmd.gov](mailto:ccarter@aqmd.gov)

---

-----Original Message-----

**From:** Beruldsen, Knut J [mailto:Knut.J.Beruldsen@conocophillips.com]  
**Sent:** Wednesday, December 31, 2008 3:24 PM  
**To:** Cynthia Carter  
**Subject:** RE: IC Engine device ID 670 (A/N 486519)

Cynthia,

Attached are the requested records for the subject engine.

The subject industrial water pump engine is part of the refinery's industrial water system and only operates

1/7/2009

when electric water pump 349 is out of service. Pump 349 experienced a bearing failure during June 2008 and was taken out of service for maintenance. While Pump 349 was out of service the industrial water pump engine operated for 26 hours resulting in an exceedance of the annual operating hours limit.

If you have any questions or need additional information, please call me at (310) 522-8037.

Knut

---

**From:** Cynthia Carter [mailto:ccarter@aqmd.gov]  
**Sent:** Friday, November 21, 2008 8:38 AM  
**To:** Beruldsen, Knut J  
**Subject:** IC Engine device ID 670 (A/N 486519)

Knut,

I neglected to ask you how does ConocoPhillips' IC Engine device ID 670 complies with the following conditions:

- Condition C1.68:

The operator shall limit the operating time to no more than 20 hours in any one calendar year:

The operator shall install and maintain a(n) non resettable time meter to accurately indicate the elapsed operating time of the engine.

The operator shall keep records in a manner approved by the District, for the following parameter(s) or item(s): An engine operating log listing the date of operation, and the elapsed operating time in hours. The log shall be kept and maintained on file for a minimum of three years, and made available to District personnel upon request.

[RULE 1470, 6-1-2007]

[Devices subject to this condition : D670];

and

- Condition D135.1:

The operator shall inspect, adjust, and certify the ignition or fuel injection timing of this engine a minimum of once every 3 years of operation. Inspections, adjustments, and certifications shall be performed by a qualified mechanic and performed in accordance with the engine manufacturer's specifications and procedures.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D669, D670, D671, D672, D673, D674, D675, D676, D677, D678, D679, D680, D681, D1553, D1658, D1768]

Could you provide records/documentation for one year that shows the engine complies with these conditions?

Thanks again,  
 Cynthia

---

Cynthia Carter  
 Air Quality Engineer  
 Refinery and Waste Management Permitting  
 South Coast Air Quality Management District  
 21865 Copley Drive  
 Diamond Bar, CA 91765  
 (909)396-2431

1/7/2009

[ccarter@aqmd.gov](mailto:ccarter@aqmd.gov)

---

## Attachment V:

---

### Caterpillar Engine Information

**Cynthia Carter**

---

**From:** Beruldsen, Knut J [Knut.J.Beruldsen@conocophillips.com]  
**Sent:** Friday, October 03, 2008 10:48 AM  
**To:** Cynthia Carter  
**Subject:** RE: IC Engine device ID 670 (A/N 486519)

Cynthia,

Here's some information I received from our consultant (who specializes in Caterpillar engines) regarding the subject engine.

At the time the engine was manufactured there were no federal or state certification standards, and in most areas of the country PM emissions were not an NSR issue. Even in SCAQMD at that time NOx was the pollutant of primary concern. Also, even if PM data existed in manufacturer specs, it often was estimated based upon opacity readings and fuel consumption rates.

Attached are two references that may be useful.

The first is a list of emission rates for a variety of older CAT models. It was compiled by Quinn Power Systems in the late 1990s and includes data for various 3306 genset configurations that were compiled in 1990. Note that the nonroad program and certification did not exist in the 1980s and early 1990s. The listed rates reflect maximum rated operations.

The second is a reference sheet provided by CARB that is used for development / implementation of the stationary engine ATCM. It shows both AP-42 emission rates and CARB's own recommended emission factors for PM. For the subject engine, the CARB factor is 0.38 – 0.55 g/bhp-hr. These factors are used for both regulatory planning purposes and for permitting. SCAQMD has accepted these emission factors for several class III permit applications in the last two years and they should be acceptable in your case, because you are not attempting to obtain more than 20 hrs / yr for testing and maintenance operations.

I hope this is helpful.

Please let me know if you have any questions.

Thanks,

Knut

---

**From:** Cynthia Carter [mailto:ccarter@aqmd.gov]  
**Sent:** Wednesday, October 01, 2008 9:08 AM  
**To:** Beruldsen, Knut J  
**Subject:** RE: IC Engine device ID 670 (A/N 486519)

Hello Knut,  
I guess there's some confusion with my question number 1.

“ 1. If so, could you please provide me with documentation/data to show compliance at

11/4/2008

0.4g/bhp-hr per (c)(3)(C)(i)(I) and (d)(4)(B);

Per (c)(3)(C)(i)(I), we do not operate the engine for more than 20 hours/year for maintenance and testing purposes. For this reason, the 0.4 gram/bhp-hr PM emission limit is not applicable to this engine. Also, for the same reason, (d)(4)(B) is not applicable to this engine."

R1470 (c)(3)(C)(i)(I) is not an emission limit, it's for me to determine the engine's maintenance and testing hours. So, if your engine is cleaner and emits  $\leq 0.40$  g/bhp-hr, the rule allows for a longer period (ex. 30hrs) of maintenance and testing. On the other hand, if the engine emits  $> 0.40$  g/bhp-hr, the engine is subject to only 20 hours of maintenance and testing.

In your previous email, you asked for 20 hrs per year for maintenance and testing; therefore, I need documentation/data to prove that your engine emits PM  $> 0.40$  g/bhp-hr.

I hope this clarifies things. If not, feel free to give me a call. I'll be on vacation next week.

-Cynthia

-----Original Message-----

**From:** Beruldsen, Knut J [mailto:Knut.J.Beruldsen@conocophillips.com]

**Sent:** Tuesday, September 30, 2008 3:59 PM

**To:** Cynthia Carter

**Subject:** RE: IC Engine device ID 670 (A/N 486519)

Cynthia,

The information you requested is provided below in blue ink. Sorry it took me so long to get back to you.

Please call me at (310) 522-8037 if you have any questions.

Thanks,

Knut

---

**From:** Cynthia Carter [mailto:ccarter@aqmd.gov]

**Sent:** Tuesday, September 09, 2008 11:10 AM

**To:** Beruldsen, Knut J

**Subject:** IC Engine device ID 670 (A/N 486519)

Hello Knut,

I need to find out which method of compliance for Rule 1470 ConocoPhillips will follow for their proposal to reclassify their prime IC Engine (device ID D670) to an emergency engine under A/N 486519.

According to Rule 1470(c)(3)(C)(i)(I), it does not limit the operation of an emergency engine, but limits the maintenance and testing time. The engine currently has Condition C1.68 to limit its operation to 20 hours/yr, so I would like to know if ConocoPhillips wants this to change to maintenance and testing 20 hours/yr?

If possible, ConocoPhillips would like 20 hours/year for maintenance and testing

purposes.

1. If so, could you please provide me with documentation/data to show compliance at 0.4g/bhp-hr per (c)(3)(C)(i)(I) and (d)(4)(B);

Per (c)(3)(C)(i)(I), we do not operate the engine for more than 20 hours/year for maintenance and testing purposes. For this reason, the 0.4 gram/bhp-hr PM emission limit is not applicable to this engine. Also, for the same reason, (d)(4)(B) is not applicable to this engine.

2. Could you please provide me with some documentation that shows the engine complies with its other permit condition B61.5 and 40 CFR 63 Subpart ZZZZ.

Condition B61.5 requires use of diesel fuel with a max sulfur content of 15 ppm. Diesel fuel for the engine is provided by Dion & Sons and a copy of a fuel certification letter dated September 23, 2008, is attached.

Part 63 Subpart ZZZZ does not have any requirements applicable to existing stationary RICE with a site rating below 250 BHP.

The compliance plan and the information submitted do not discuss the specifics of the subject engine. The compliance plan discussed on how it is exempt from the requirements of Rule 1470 (c)(5) and the report does not elaborate on Rule 1470.

Rule 1110.2 limits emergency engines to operate no more than 200 hours, so there may be a new condition that specifies a limit on the engine's emergency operation.

If I have misinterpreted the rule or have misunderstood the purpose of the application, please let me know.

Please provide the answers no later than **COB Friday, September 26, 2008** to allow for a timely review of the application. Additional information may be required later. We honor any information provided as confidential. If you have any questions or need more time regarding your application, feel free to contact me.

Regards,  
Cynthia

~~~~~  
Cynthia Carter  
Air Quality Engineer  
Refinery and Waste Management Permitting  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
(909)396-2431  
[ccarter@aqmd.gov](mailto:ccarter@aqmd.gov)  
~~~~~

EMISSIONS DATA - DIESEL STANDBY GENERATOR SETS

(EMISSIONS.WK1)

ENGINE MODEL	KW	HP	ASPIRATION	RPM	FUEL CONS. GPH	EMISSIONS GMS/HR					EMISSIONS GMS/HP-HR					EXH TEMP DEG F	EXH FLOW CFM	DATE LAST UPDATED	CONF. SOURCE LEVEL	
						HC	NOX	CO	SO2	DPM	HC	NOX	CO	SO2	DPM					
3114	50	78	T	1800																
3114	60	96	T	1800	4.9	80	910	140	60	11	0.00	0.0	0.0	0.0	0.00	765	506	00/00/00		
3114	75	113	TA	1800							0.83	9.5	1.5	0.6	0.11	840	588	12/00/88	BZ	2
3116	100	158	T	1800	7.7	95	1500	170	100	17	0.00	0.0	0.0	0.0	0.00	1000	706	00/00/00		
3116	125	187	TA	1800	9.0	100	1800	200	125	20	0.81	9.6	1.1	0.6	0.11	840	915	01/00/89	BZ	4
3208	100	158	NA	1800	7.7	30	1025	70	98	19	0.53	9.6	1.1	0.7	0.11	870	1028	01/00/89	BZ	4
3208	125	192	T	1800	9.5	40	1700	180	125	35	0.19	8.6	0.4	0.6	0.12	680	875	07/00/88	TIF	2
3208	150	230	T	1800	11.3	25	1750	200	150	40	0.21	8.9	0.9	0.7	0.18	900	1090	03/00/89	DGL	6
3208	175	269	T	1800	12.7	10	1667	740	187	145	0.11	7.6	0.9	0.7	0.17	1000	1255	07/00/88	TIF	4
3208	150	228	ATAAC	1800	10.9	20	1346	240	129	56	0.04	6.2	2.8	0.6	0.54	990	1370	08/18/92	cat	1
3208	175	264	ATAAC	1800	12.7	40	1580	240	148	65	0.09	5.9	1.1	0.6	0.25	950	1225	08/00/89	DGL	5
3208	200	299	ATAAC	1800	14.8	60	1785	240	167	73	0.15	5.9	0.9	0.6	0.25	990	1370	10/00/89	DGL	5
3306	200	306	TA	1800	15.9						0.20	6.0	0.8	0.6	0.24	1017	1619	06/00/89	CAT	3
3306	225	339	TA	1800	17.6	56	2667	360	224	80	0.2	8.0	1.0		0.25	986	1936	09/11/90	DGL	3
3306	250	375	ATAAC	1800	18.8	178	1452	904	239	143	0.17	7.9	1.1	0.7	0.24	986	1936	09/11/90	DGL	4
3406	275	406	TA	1800	20.8	50	2803	450	264	101	0.47	3.9	2.4	0.6	0.38	1007	2005	01/00/90	CAT/AQ	3
3406	300	439	TA	1800	22.5	115	3912	350	290	22	0.12	7.2	1.1	0.7	0.25	1018	2103	01/00/90	EXCHEM	1
3406	350	519	TA	1800	28.8	120	4584	400	341	47	0.26	8.9	0.8	0.7	0.25	982	2277	07/00/88	TIF	2
3406	400	587	TA	1800	29.0	50	4800	450	385	70	0.23	8.8	0.8	0.7	0.09	997	2427	04/27/90	EXCHEM	1
3408	400	604	TA	1800	32.5	60	4750	310	375	325	0.09	8.2	0.8	0.7	0.09	1022	2600	05/15/88	EXCHEM	1
3412	475	724	T	1800	38.1	30	5440	800	480	180	0.10	7.9	0.5	0.8	0.54	1036	3331	03/00/90	DGL	6
3412	500	749	T	1800	39.3	50	4510	1125	502	140	0.04	7.5	1.1	0.7	0.25	970	3520	04/00/87	EXCHEM	2
3412	450	672	TA	1800	33.5						0.07	6.0	1.5	0.7	0.19	1108	4188	08/00/89	DGL	4
3412	500	745	TA	1800	39.3	150	5200	900	510	200	0.2	7.2	1.2		0.25	1120	4231	01/17/90	EXCHEM	1
3412	550	815	TA	1800	40.8						0.20	7.0	1.2	0.7	0.27	900	3925	09/11/90	DGL	4
3412	600	890	TA	1800	44.5	120	5260	900	585	112	0.2	6.5	1.0		0.2	950	4320	01/00/90	DGL	4
3508	650	945	TA	1800	49.1	250	9500	1750	600	200	0.13	5.9	1.0	0.6	0.13	939	4777	09/11/90	DGL	4
3508	700	1027	TA	1800	51.2	250	10500	1800	650	180	0.26	10.1	1.9	0.6	0.21	1100	5229	09/00/90	EXCHEM	1
3508	750	1098	TA	1800	55.7	203	11425	2000	714	253	0.24	10.2	1.8	0.6	0.18	953	5720	02/00/90	TIF	4
3508	800	1196	TA	1800	62.4	200	11308	2300	738	241	0.18	10.4	1.8	0.7	0.23	970	6075	07/00/88	TIF	4
3508	900	1337	TA	1800	70.4	88	12351	3388	893	411	0.17	9.5	1.9	0.6	0.20	981	6405	01/05/90	EXCHEM	1
3508	1000	1486	TA	1800	72.0	53	14100	3300	921	437	0.07	9.2	2.5	0.7	0.31	1000	6950	07/00/88	TIF	2
3512	1000	1432	TA	1800	72.1	500	14977	2000	975	178	0.04	9.5	2.2	0.6	0.29	1056	7774	08/29/91	EXCHEM	1
3512	1100	1575	TA	1800	76.4	490	14100	3760	1044	420	0.35	10.5	1.4	0.7	0.12	985	8850	10/00/87	SLSGRV	2
3512	1250	1786	TA	1800	90.9	310	14469	4768	1180	570	0.31	9.0	2.4	0.7	0.27	890	8580	01/00/90	TIF	2
3512	1400	2019	TA	1800	95.7	350	16500	5000	1300	330	0.17	8.1	2.7	0.7	0.32	902	9097	02/00/90	CAT/AQ	2
3512	1500	2168	TA	1800	103.0	65	23277	5453	1311	373	0.17	8.2	2.5	0.6	0.16	1018	10337	07/00/89	EXCHEM	1
3516	1500	2149	TA	1800	108.8	774	22277	2933	1398	324	0.03	10.7	2.5	0.6	0.17	1003	11122	01/00/90	DGL	4
3516	1600	2227	TA	1800	115.5	684	22944	4285	1468	399	0.03	10.4	1.4	0.7	0.15	1004	11849	01/30/90	EXCHEM	1
3516	1750	2488	TA-4	1800	124.3	532	22015	6994	1636	677	0.31	10.3	1.9	0.7	0.18	900	12800	09/00/88	EXCHEM	1
3516	2000	2836	TA	1800	137.5	138	27955	6200	1768	246	0.21	8.8	2.8	0.7	0.27	959	14241	01/00/90	CAT/AQ	2
											0.05	9.9	2.2	0.6	0.09	1053	14700	01/10/90	EXCHEM	1
																1027	15599	04/26/90	EXCHEM	1

*from power system (cat dealer) reflects 1988 estimate TIF data came from CAT - TIF existed before TMI was developed*

NOTES CONFIDENCE LEVEL - 1, HIGHEST; 6, GUESS

AIR FUEL RATIO - 20:1

SULFUR CONTENT = .05% MAX ALLOWABLE

Available Stationary Diesel-fueled Engine Emission Factors

**Emission Factors (g/hp-hr or g/bhp-hr)**

Horsepower Range	Model Year	ARB OFFROAD Model PM10 (g/bhp-hr)	AP-42	HC	CO	NOx
50 - 120	pre - 1988	0.84	less than 600 hp: 1.0 g/hp-hr ("D" rating)	1.44	4.8	13
	1988 - 2003	0.69		0.99	3.5	8.75
	2004	0.39		0.99	3.5	8.75
	2005	0.29		0.99	3.5	8.75
121 - 175	pre - 1970	0.77		1.32	4.4	14
	1970 - 1971	0.66		1.1	4.4	13
	1972 - 1987	0.55		1	4.3	12
	1988 - 2002	0.38		0.68	2.7	8.17
	2003	0.24		0.68	2.7	8.17
	2004	0.19		0.68	2.7	8.17
176 - 250	pre - 1970	0.77		1.32	4.4	14
	1970 - 1971	0.66		1.1	4.4	13
	1972 - 1987	0.55		1	4.4	12
	1988 - 2002	0.38		0.68	2.7	8.17
	2003	0.24	0.68	2.7	8.17	
	2004	0.19	0.68	2.7	8.17	
251 - 500	pre - 1970	0.74	1.28	4.2	14	
	1970 - 1971	0.63	1.05	4.2	13	
	1972 - 1987	0.53	0.95	4.2	12	
	1988 - 1995	0.38	0.68	2.7	8.17	
	1996 - 2000	0.15	0.68	2.7	8.17	
	2001	0.12	0.68	2.7	8.17	
501 - 750	2002 - 2005	0.11	0.68	2.7	8.17	
	pre - 1970	0.74	1.26	4.2	14	
	1970 - 1971	0.63	1.05	4.2	13	
	1972 - 1987	0.53	0.95	4.2	12	
	1988 - 1995	0.38	0.68	2.7	8.17	
	1996 - 2000	0.15	0.68	2.7	8.17	
751+	2001	0.12	0.68	2.7	8.17	
	2002 - 2005	0.11	0.68	2.7	8.17	
	pre - 1970	0.74	<u>Distribution Data:</u>	1.26	4.2	14
	1970 - 1971	0.63	Total PM - 0.24	1.05	4.2	13
	1972 - 1987	0.53	g/hp-hr ("D" rating,	0.95	4.2	12
	1988 - 1999	0.38	up from "E")	0.68	2.7	8.2
2000 - 2005	0.15		0.68	2.7	8.2	

ARB Offroad documentation (MSC #9-32) linked at: <http://www.arb.ca.gov/msel/off-road/pubs.htm>

US EPA Certification data for non-road diesel engines is available here:

*Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines (CARB, October 2000)*

<http://www.arb.ca.gov/diesel/documents/rmg.htm>

CATEF Emission Factors: <http://www.arb.ca.gov/ei/catef/catef.htm>

'Hot Spots' Program: <http://www.arb.ca.gov/ab2598/ab2598.htm>

Emission Inventory: <http://www.arb.ca.gov/ei/ei.htm>

Stationary DICE ATCM: <http://www.arb.ca.gov/diesel/statport.htm>

## Attachment VI:

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ConocoPhillips' Agreement to  
Permit Equipment and Conditions  
(February 24, 2009)

**Cynthia Carter**

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**From:** Beruldsen, Knut J [Knut.J.Beruldsen@conocophillips.com]  
**Sent:** Tuesday, February 24, 2009 1:10 PM  
**To:** Cynthia Carter  
**Subject:** RE: DRAFT Permit IC Engine device ID D670 (A/N 486519)\_rev2

Cynthia,

I only have one comment. Emergency standby engines are exempt from Rule 1110.2 subdivision (d) requirements. Based on this exemption, is condition H23.30 applicable to the reclassified engine? Let me know.

Thanks,

Knut

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**From:** Cynthia Carter [mailto:ccarter@aqmd.gov]  
**Sent:** Friday, February 20, 2009 3:20 PM  
**To:** Beruldsen, Knut J  
**Subject:** DRAFT Permit IC Engine device ID D670 (A/N 486519)\_rev2

Hi Knut,

Here's an update on the draft permit for the IC Engine D670. C1.83, E193.6, and H23.30 have been modified and/or removed.

Please carefully review and comment.

Thanks,  
Cynthia

<<File: DRAFT Permit IC Engine AN 486519\_rev2.pdf>>

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**Cynthia Carter**  
**Air Quality Engineer**  
Refinery and Waste Management Permitting  
South Coast Air Quality Management District  
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## End of Evaluation

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